

WHAT IS CLAIMED IS:

- 1 1. A navigational system for a vehicle comprising an optical
2 arrangement installed on at least one transparent viewing surface for a
3 driver of the vehicle, said optical arrangement representing images
4 displayed on said at least one viewing surface producing guiding
5 images for imparting directions to the driver.
- 1 2. A navigational system as claimed in Claim 1, wherein said images
2 comprise graphical representation pointing towards objects observed by
3 the driver.
- 1 3. A navigational system as claimed in Claim 2, wherein said graphical
2 representations comprise an image of at least one arrow display on said
3 at least one viewing surface pointing towards a selected object for
4 guiding the driver in a specified direction of travel.
- 1 4. A navigational system as claimed in Claim 3, wherein said at least
2 on arrow is projected on said at least one viewing surface so as to be
3 perceived in a 3-dimentional spatial image.
- 1 5. A navigational system as claimed in claim 1, wherein said at least
2 one viewing surface comprises the windshield of an automotive vehicle.
- 1 6. A navigational system as claimed in Claim 1, wherein said at least
2 one viewing surface comprises a side front window of an automotive
3 vehicle.

1 7. A navigational system as claimed in Claim 1, wherein said at least
2 one viewing surface comprises eyeglasses worn by the driver of the
3 vehicle.

1 8. A navigational system as claimed in Claim 1, wherein said at least
2 one viewing surface comprises lenses of said optical arrangement
3 having at least one arrow provided thereon, said lenses having
4 regulatable degrees of curvature and through which there are displayed
5 objects located exteriorly of said vehicle, said lens curvatures
6 facilitating the 3-dimensional spatial image perception.

1 9. A navigational system as claimed in Claim 1, wherein said system
2 comprises means to assist drivers of the vehicle having reading
3 disabilities and restrictions to read the names of objects and streets
4 displayed on said at least one viewing surface.

1 10. A navigational system as claimed in Claim 1, wherein said system
2 comprises means to assist drivers of the vehicle to recognize the colors
3 of traffic lights as displayed on said at least one viewing surface.

1 11. A navigational system as claimed in Claim 3, wherein said system
2 is in operative communications with a global positioning system (GPS)
3 so as to impart information to the driver regarding objects observed on
4 said at least one viewing surface and as indicated by the driver by
5 pointing to the objects with pointing means.

1 12. A navigational system as claimed in Claim 11, wherein said
2 pointing means comprise said at least one arrow.

1 13. A navigational system as claimed in Claim 11, wherein a computer
2 is operatively connected to said system for operating said at least one

3 arrow; means for inputting information to said computer by said driver;
4 said computer including means for analyzing said information displayed
5 on said at least one viewing surface while communicating with said
6 global positioning system, and imparting directional instructions to said
7 driver in responsive to processing of said items of information.

1 14. A navigational system as claimed in Claim 13, wherein said
2 information is inputted to said computer through a microphone in the
3 form of verbal commands, and instructions received through a
4 loudspeaker.

1 15. A navigational system as claimed in Claim 14, wherein said
2 information is inputted to said computer through hand-written or
3 keyboard-operated functions.

1 16. A navigational system as claimed in Claim 13, wherein said
2 computer processes interrogations from said system regarding tasks
3 including the reading of signs, determining colors and identifying
4 objects, processing images related to specified tasks and providing
5 answers to the driver responsive thereto which are displayed on said at
6 least one viewing surface to assist the driver in directional guidance of
7 the vehicle.

1 17. A navigational system as claimed in Claim 13, wherein control
2 means for said system are installed on a driver steering wheel of said
3 vehicle.

1 18. A navigational system as claimed in Claim 17, wherein said control
2 means comprise a mouse which is mounted on the steering wheel.

1 19. A method for the navigation of a vehicle comprising installing an
2 optical arrangement on at least one transparent viewing surface for a
3 driver of the vehicle, said optical arrangement representing images
4 displayed on said at least one viewing surface producing guiding
5 images for imparting directions to the driver.

1 20. A navigation method as claimed in Claim 19, wherein said images
2 comprise graphical representation pointing towards objects observed by
3 the driver.

1 21. A navigation method as claimed in Claim 20, wherein said
2 graphical representations comprise an image of at least one arrow
3 display on said at least one viewing surface pointing towards a selected
4 object for guiding the driver in a specified direction of travel.

1 22. A navigation method as claimed in Claim 21, wherein said at least
2 one arrow is projected on said at least one viewing surface so as to be
3 perceived in a 3-dimensional spatial image.

1 23. A navigation method as claimed in claim 19, wherein said at least
2 one viewing surface comprises the windshield of an automotive vehicle.

1 24. A navigation method as claimed in Claim 19, wherein said at least
2 one viewing surface comprises a side front window of an automotive
3 vehicle.

1 25. A navigation method as claimed in Claim 19, wherein said at least
2 one viewing surface comprises eyeglasses worn by the driver of the
3 vehicle.

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1 26. A navigation method as claimed in Claim 19, wherein said at least
2 one viewing surface comprises lenses of said optical arrangement
3 having at least one arrow provided thereon, said lenses having
4 regulatable degrees of curvature and through which there are displayed
5 objects located exteriorly of said vehicle, said lens curvatures
6 facilitating the 3-dimensional spatial image perception.

1 27. A navigation system as claimed in Claim 19, wherein said system
2 to assists drivers of the vehicle having reading disabilities and
3 restrictions in reading the names of objects and streets displayed on
4 said at least one viewing surface.

1 28. A navigation method as claimed in Claim 19, wherein said system
2 comprises assisting drivers of the vehicle in recognizing the colors of
3 traffic lights as displayed on said at least on viewing surface.

1 29. A navigation method as claimed in Claim 21, wherein said system
2 is in operative communications with a global positioning system (GPS)
3 so as to impart information to the driver regarding objects observed on
4 said at least one viewing surface and as indicated by the driver by
5 pointing to the objects with pointing means.

1 30. A navigation method as claimed in Claim 29, wherein said pointing
2 means comprise said at least one arrow.

1 31. A navigational system as claimed in Claim 29, wherein a computer
2 is operatively connected to said system for operating said at least one
3 arrow; inputting information to said computer by said driver; said
4 computer analyzing said information displayed on said at least one
5 viewing surface while communicating with said global positioning

6 system, and imparting directional instructions to said driver in
7 responsive to processing of said items of information.

1 32. A navigation method as claimed in Claim 31, wherein said
2 information is inputted to said computer through a microphone in the
3 form of verbal commands, and instructions received through a
4 loudspeaker.

1 33. A navigation method as claimed in Claim 32, wherein said
2 information is inputted to said computer through hand-written or
3 keyboard-operated functions.

1 34. A navigation method as claimed in Claim 31, wherein said
2 computer processes interrogations from said system regarding tasks
3 including the reading of signs, determining colors and identifying
4 objects, processing images related to specified tasks and providing
5 answers to the driver responsive thereto which are displayed on said at
6 least one viewing surface to assist the driver in directional guidance of
7 the vehicle.

1 35. A navigation method as claimed in Claim 31, wherein a control for
2 said system is installed on a driver steering wheel of said vehicle.

1 36. A navigation method as claimed in Claim 35, wherein said control
2 comprises a mouse which is mounted on the steering wheel.